

MONTANA STATE DEPARTMENT OF FISH AND GAME
FEDERAL AID IN FISH RESTORATION SECTION

HELENA, MONTANA

JOB COMPLETION REPORT
DEVELOPMENT AND OPERATIONSState of MontanaProject No. F-24-D-8Job No. IPeriod Covered August 1, 1957 to April 30, 1958Name Northeastern Montana Fishery StudyTitle Statewide Lake and Stream
Rehabilitation - Whitetail
ReservoirAbstract:

A program to eradicate with toxicants an undesirable population of bullheads and suckers in Whitetail Reservoir was carried out on September 19, 1957. Minnows and small suckers were observed in distress 30 minutes after application had begun, and larger suckers were seen lying along the shore about 3 hours later. Bullheads were slower to show the effects of the toxicant; rising first very slowly to the surface about 5 hours after the start of the application and collecting along the windward shore nearly 2 hours later. No northern pike or largemouth bass were seen or reported, although they were stocked in previous years. Surface temperature of the water warmed from 59°F to 61°F during the application period. Virtually all of the bullheads and a few of the suckers were taken by residents of the area. All fish observed on the day following application of the toxicant were in distress or dying. Five days later, no live fish were found in any part of the reservoir. It is recommended that largemouth bass be stocked in the reservoir as soon as they become available following a test of the toxicity of the water after spring run-off in 1958.

Objectives:

To readicate an undesirable population of Suckers and Bullheads from Whitetail Reservoir and to restock with Largemouth Bass.

Techniques Used:

Two boats were used in applying toxicant to the 25 acre reservoir. One boat towed sacks of Fish-Tox over the deeper portion of the water in a criss-cross pattern. The other boat, equipped with a motor-driven pump, covered the shoreline area and the shallows, spraying with Pro-Noxfish. Concentration of the Pro-Noxfish was regulated by valves installed on the pump intake. An Indian back pump was used to apply toxicant to several small potholes in the drainage immediately above the reservoir. Results of the eradication project were investigated on the day of the application, again on the following day and again five days later on September 25, 1957.

Findings

Total time taken to apply the toxicant was $3\frac{1}{2}$ hours, 12:30 p.m. to 4:00 p.m. on September 19, 1957. Surface water temperature warmed from 59° to 61° F. during the $3\frac{1}{2}$ hour period. Within 30 minutes after application had begun, minnow species and small suckers were observed in distress; by the time application was completed, many of the larger suckers were lying along the shore. The bullheads took considerably more time to show the effects of exposure to the toxicant; the first were observed rising very slowly to the surface shortly after 5:00 p.m. By 7:00 p.m. bullheads were beginning to accumulate along the rock face of the dam on the east end of the reservoir. Fish-hungry spectators, wielding garden rakes, pitchforks, and long handled homemade dip nets began taking out bullheads (and a few suckers) almost as soon as they appeared. The landowner, Mr. Wiley, said he had heard people coming for fish all night, and had watched them from midnight on. At 7:00 a.m. of the following morning he estimated that over 1,000 pounds of bullheads had been taken out during the time he had watched.

On the 20th of September all fish observed were in distress or dying. In traveling the entire length of the shoreline, no healthy, active fish were seen.

On the 25th of September no livefish were found in any part of the reservoir. The shores were covered with dead suckers in the first stage of decomposition.

No northern pike nor largemouth bass were observed or reported, although they had been stocked in previous years. It is possible, however, that some may have been found and picked up during the night.

Assistance in the project was given by Warden Supervisor, Tom Hay, Game Manager, Dick Trueblood and Warden, Peter F. Quiring.

Recommendations:

That a test of the toxicity of the water in the reservoir be made following spring run-off in 1958, and that largemouth bass be stocked when they become available.

Prepared by William Alvord

Approved by GEORGE D. HOLTON

Date November 1, 1957